Product information

SIPERNAT® 820 A

Characteristic physico-chemical data*)

Properties and test methods	Unit	Value
Specific surface area (N_2) Multipoint following ISO 9277	m^2/g	80
DOA absorption [1] internal method	ml/100g	170
Particle size, d50 Laser diffraction following ISO 13320-1	µm	7.0
Loss on drying 2 h at 105°C following ISO 787-2	%	≤ 7.0
pH value 5 % in water following ISO 787-9	-	10.1
Sieve residue 45 µm spray following ISO 3262-19	%	≤ 0.2
Tamped density not sieved following ISO 787-11	g/l	210
Standard value Y following DIN 53163	-	≥ 95
Loss on ignition [2] 2 h at 1000°C following ISO 3262-1	%	≤ 10.0
SiO_2 content [3] following ISO 3262-19	%	≥ 80
Na content [3] internal method	%	5.5
Al content [3] internal method	%	6.0
Fe content [3] internal method	ppm	≤ 400
Sulfate content [1] internal method	%	≤ 1.5

1) based on original substance
2) based on dry substance (2 h/105°C)
3) based on ignited substance (2 h/1000°C)
*) The given data are typical values. Specifications on request.

Registrations

SIPERNAT® 820 A

CAS-No.	1344-00-9
REACH (Europe)	registered
TSCA (USA) AICS (Australia) DSL (Canada)	registered
PICCS (Philippines) IECS (China)	registered
ENCS (Japan)	registered
KECI (Korea)	registered
NZIoC (New Zealand)	registered

SIPERNAT® represents a specific product range of precipitated silica, aluminium and calcium silicates.

SIPERNAT® 820 A is a sodium aluminum silicate with a high level of whiteness and reduced coarse particles.

Properties and applications

SIPERNAT® 820 A is highly recommended for partial substitution of white pigments in emulsion paints, as a matting agent for silk glossy paint systems and as a filler in printing inks. SIPERNAT® 820 A is also used as a special-purpose filler for mechanical graphics papers, as an extender for titanium dioxide in papermaking, and as a white pigment for coated papers. It has beneficial effects on reducing possible ink bleeding, the printability, smoothness and friction coefficient of the paper, as well as enhancing pitch control.

Safety and handling

Information concerning the safety of this product is listed in thecorresponding Safety Data Sheet, which will be sent with the first delivery or upon updating. Such information is also available from: Evonik Resource Efficiency GmbH, Product Safety Department, E-Mail: sds-hu@evonik.com. We recommend to read carefully the safety data sheet prior to the use of our product.

Packaging and storage

For details regarding our packaging options for this product, please contact your local sales representative.
Our silica products are inert and extremely stable chemically. However, due to their high specific surface area, they can absorb moisture and volatile organic compounds from the surrounding atmosphere. Therefore, we recommend storing the products in sealed containers in a dry, cool place, and removed from volatile organic substances. Even if a product is stored under these conditions, after a longer period it can still pick up ambient moisture over time, which could lead to its exceeding the specified moisture content. For this reason, our recommended use-by date is 24 months after date of manufacture. Product more than 24 months old should be tested for moisture content before use in order to make certain that it is still suitable for the intended application.

Applied Technology
Evonik Resource Efficiency GmbH
Business Line Silica
Rodenbacher Chaussee 4
63457 Hanau-Wolfgang
Germany
PHONE +49 6181 59-3536
FAX +49 6181 59-4096
ask-si@evonik.com
www.sipernat.com

Europe/ Middle-East/ Africa/ Latin America
Evonik Resource Efficiency GmbH
Business Line Silica
Rodenbacher Chaussee 4
63457 Hanau-Wolfgang
Germany
PHONE +49 6181 59-8118
FAX +49 6181 59-78118
ask-si@evonik.com
www.sipernat.com

North America
Evonik Corporation
Business Line Silica
299 Jefferson Road
Parsippany, NJ 07054-0677
USA
PHONE +1 800 233-8052
FAX +1 973 929-8502
ask-si@evonik.com
www.sipernat.com

Asia-Pacific
Evonik (SEA) Pte. Ltd.
Business Line Silica
3 International Business Park
#07-18, Nordic European Centre
Singapore 609927
PHONE +65 6 809 6877
FAX +65 6 809 6677
ask-si-asia@evonik.com
www.sipernat.com